## **REMARKS**

Claims 1, 3-10 and 12-19 are pending in the subject application. Claims 1 is currently amended to recite that component (A) is formed from (a) a diorganopolysiloxane having siliconbonded hydrogen atoms at the two ends of the molecular chain and (b) a diolefin selected from the group of 1,3-butadiene, 1,4-pentadiene, 1,5-hexadiene, 1,7-octadiene, and combinations thereof. Support for currently amended claim 1 can be found at least in paragraphs [0009], [0019] and [0021]-[0023] of the subject application as published (specifically, U.S. Publ. Pat. Appl. No. 2006/0104929). Claims 6 and 7 are currently amended to recite that component (b) is a diolefin selected from the group of 1,3-butadiene, 1,4-pentadiene, 1,5-hexadiene, 1,7-octadiene, and combinations thereof. Support for currently amended claims 6 and 7 can be found at least in paragraphs [0009], [0019] and [0021]-[0023] of the subject application as published. As such, no new matter is introduced via the present Amendment. Claims 6, 7 and 16-19 were previously withdrawn. Claims 2 and 11 were previously cancelled. No claims are cancelled or added via the present Amendment.

Claims 1, 3-5, 8-10 and 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,013,682 to Dalle et al. (the '682 patent) in view of Lochhead, Robert Y., "Encyclopedia of Polymers and Thickeners for Cosmetics," Cosmetics and Toiletries, 108 (1993) (hereinafter "Lochhead"). Claims 1, 3-5, 8-10 and 12-15 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the '682 patent in view of Lochhead et al. and further in view of U.S. Pat. No. 4,620,878 to Gee (the '878 patent). In view of Applicants' amendment, as well as the reasons set forth below, the Examiner's rejections are respectfully overcome.

H&H Ref. No. 071051.00003 Serial No.: 10/526,184

The Examiner relies upon the '682 patent as the primary reference in each of the rejections set forth above. In relying on the '682 patent, the Examiner contends that the '682 patent "discloses emulsions that are prepared using organosilicon polymers whose main chain is composed of diorganosiloxane units and alkylene units that are used in the preparation of aqueous emulsion of varying mean particle size, depending on the surfactants and water addition process used." (see page 10 of the Office Action). Applicants note that the portion of the '682 patent relied upon by the Examiner in making this assertion is Examples 1-3 (column 7, line 5 – column 8, line 5). In these examples of the '682 patent, an organopolysiloxane is formed by reacting a dimethylvinylsiloxy terminated polydimethylsiloxane with an organohydrogenpolysiloxane (of formula Me<sub>2</sub>HSiO(Me<sub>2</sub>SiO)<sub>20</sub>SiMe<sub>2</sub>H) in the presence of a hydrosilylation catalyst.

Conversely, in view of Applicants' amendment, claimed component (A) of the subject application is formed from (a) a diorganopolysiloxane having silicon-bonded hydrogen atoms at the two ends of the molecular chain and (b) a diolefin selected from the group of 1,3-butadiene, 1,4-pentadiene, 1,5-hexadiene, 1,7-octadiene, and combinations thereof. Notably, a dimethylvinylsiloxy terminated polydimethylsiloxane, as disclosed in the '682 patent, is not a diolefin selected from the group of 1,3-butadiene, 1,4-pentadiene, 1,5-hexadiene, and/or 1,7-octadiene, as currently claimed in the subject application. For example, diorganopolysiloxanes have backbones comprising Si-O- repeating units, whereas diolefins generally have backbones comprising carbon-carbon bonds (with at least one ethylenically unsaturated group).

In fact, as set forth in column 2, lines 9-15 of the '682 patent, the '682 patent states that "[a]ccording to the invention, a mixture is prepared by blending (I) a composition containing at

H&H Ref. No. 071051.00003

least one <u>polysiloxane</u>, at least one <u>organosilicon</u> material that reacts with said polysiloxane by a chain extension reaction . . ." (emphasis added). Clearly, each of the reactants in the '682 patent are required to include silicon atoms, as designated by the language "polysiloxane" and "organosilicon material," whereas the diolefin claimed in the subject application does not include such silicon atoms. This is supplemented in column 2, lines 42-64 of the '682 patent, which states that "[t]he polysiloxane(s) used in the above reactions generally comprises a substantially linear polymer of the structure:

$$R' \xrightarrow{Si} Si \xrightarrow{I} O \xrightarrow{Si} R O \xrightarrow{R'} Si \xrightarrow{R'} R'$$

$$R' \xrightarrow{R'} R R'$$

$$R' \xrightarrow{R'} R'$$

$$R' \xrightarrow{R'} R'$$

$$R' \xrightarrow{R'} R'$$

$$R' \xrightarrow{R'} R'$$

In this structure, R and R' are chosen based on the reaction mechanism utilized between the polysiloxane and the organosilicon material (see column 2, lines 42-60 of the '682 patent). Notably, this polysiloxane of the '682 patent has a main chain comprising only siloxane units, i.e., Si-O units. Thus, it is clear that the '682 patent fails to disclose, teach, or even suggest a linear organosilicon polymer which is formed from (a) a diorganopolysiloxane having siliconbonded hydrogen atoms at the two ends of the molecular chain and (b) a diolefin selected from the group of 1,3-butadiene, 1,4-pentadiene, 1,5-hexadiene, 1,7-octadiene, and combinations thereof, as now claimed in the subject application. As such, the Examiner's rejections are respectfully overcome.

In addition, the Applicants note that neither of the Examiner's other references, i.e., neither Lochhead nor the '878 patent, remedies the deficiency of the '682 patent with respect to currently claimed component (A). In particular, the Examiner relied on Lochhead merely for

H&H Ref. No. 071051.00003 Serial No.: 10/526,184

purposes relating to claimed component (B). The Examiner relied on the '878 patent merely for

purposes relating to the particle size of the emulsion. Moreover, regardless of the reasons for

which the Examiner relied on these secondary references, these references fail to disclose, teach,

or even suggest a linear organosilicon polymer which is formed from (a) a diorganopolysiloxane

having silicon-bonded hydrogen atoms at the two ends of the molecular chain and (b) a diolefin

selected from the group of 1,3-butadiene, 1,4-pentadiene, 1,5-hexadiene, 1,7-octadiene, and

combinations thereof, as now claimed in the subject application.

In view of the foregoing, the Applicants respectfully submit that independent claim 1, as

well as claims 3-5 and 12-15 which depend therefrom, and independent claim 8, as well as claims 9-

10 which depend therefrom, are both novel and non-obvious over the prior art including over the

'682 patent, Lochhead, and the '878 patent, either individually or in combination. As such, the

Applicants submit that the claims are in condition for allowance and respectfully request such

allowance.

The Applicants also submit that independent claims 6 and 7, as well as claims 16-19, which

depend from independent claim 6 or 7, respectively, are novel and non-obvious over the prior art

including over the '682 patent, Lochhead, and the '878 patent, either individually or in combination.

Further, because Claims 6 and 7, which were previously withdrawn by the Examiner, have been

amended to incorporate all of the claim limitations of presently amended claim 1, the Applicants

respectfully request rejoinder of these claims. MPEP § 821.04.

The proper fee for a two-month extension of time is submitted herewith. While it is

believed that no additional fees are presently due, the Commissioner is authorized to charge the

-8-

Deposit Account No. 08-2789, in the name of Howard & Howard Attorneys PLLC for any fees or credit the account for any overpayment.

Respectfully submitted,

## HOWARD & HOWARD ATTORNEYS PLLC

March 12, 2010

Date

/David M. LaPrairie/

David M. LaPrairie, Registration No. 46,295

450 West Fourth Street

Royal Oak, Michigan 48067

(248) 723-0442

H&H Ref. No. 071051.00003 - 9 -

Serial No.: 10/526,184